# CLARIFYING THE NOMENCLATURE OF TRIDIMERIS (ANNONACEAE)

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### ABSTRACT

The correct name for the type and sole described species of the Mexican annonaceous genus *Tridimeris* Baill. is *Tridimeris hahniana* Baill. (1869). *Uvaria hahniana* Baill. (1868) is a heterotypic and senior synonym of *Tridimeris hahniana* Baill. The epithet is eponymous of the type collector, Ludwig Hahn, in both cases. *Uvaria hahniana* cannot provide the correct name for the species as currently circumscribed, as the direct transfer is blocked by *Tridimeris hahniana*, and the avowed substitute, *Tridimeris baillonii* GE.Schatz (1994), does not have priority over *Tridimeris hahniana*. The typification of these names is briefly reviewed.

KEY WORDS: Mexico, Tridimeris baillonii, Tridimeris hahniana, typification, Uvaria hahniana

The poorly known genus *Tridimeris* (Annonaceae) is endemic to Mexico and has one described species (Kessler 1993). Along with *Desmopsis*, *Sapranthus*, and *Stenanona*, it forms the Central American element in the largely tropical Asian tribe Miliuseae (Chatrou et al. 2012). Baillon (1869) described *Tridimeris* and the sole species, *Tridimeris hahniana*, based entirely on a gathering of flowering material made by Ludwig Hahn (1836–1881) in Mexico. Confusion over the correct name of the species and its citation has arisen because the year before Baillon published *Tridimeris*, he had described (Baillon 1868) the species *Uvaria hahniana*. This was based solely on another Hahn collection, of fruiting material, from Mexico. Fries (1931) seems to have been the first to consider *Uvaria hahniana* and *Tridimeris hahniana* conspecific. When Baillon published *Tridimeris* he made no reference to *Uvaria hahniana* or its type and indicated that the fruits of *Tridimeris* were unknown. It is therefore clear that these two species names in the Annonaceae are independent and the use of the same epithet is a simple consequence of the types being collected by the same person. There was no direct transfer of *Uvaria hahniana* to *Tridimeris*, nor can it be presumed to have been Baillon's intention to do so (cf. ICN (McNeill et al. 2012) Art. 41.4)

Recognising that *Uvaria hahniana* was the oldest name available for *Tridimeris hahniana*, Schatz (in Maas et al. 1994) provided *Tridimeris baillonii* as an avowed substitute in *Tridimeris* for *Uvaria hahniana*. However, Schatz's name only has priority from its date of publication (ICN Art. 58), so *Tridimeris hahniana* remains the correct name for the species. Recent use of *Tridimeris baillonii* (Maas et al. 2012) is in error and will remain so unless *Uvaria hahniana* is ever considered a different species from *Tridimeris hahniana*.

## Note on typification

The original material of these Baillon taxa is in the Paris herbarium. These are specimens collected by Ludwig Hahn during the Commission Scientifique du Mexique in 1865-1866, images of which are available via the Sonnerat database of the Muséum National d'Histoire Naturelle. There are three sheets with annotations by Baillon of *Uvaria hahniana* and two sheets of *Tridimeris hahniana*. However only one sheet of each bears the original collection information (locality, date and collection number in one case), as cited by Baillon. I consider these sheets to be the holotypes of the two taxa as there is no direct evidence that the other sheets are true duplicates and there are no annotations to indicate that a single specimen was mounted on more than one sheet. There are red

printed labels stating 'TYPE' or 'ISOTYPE' stuck onto the sheets. However, as the latter term seems not to have been in use in botanical nomenclature until well in to the twentieth century (Pennell 1919), these have no bearing on actual type status and I consider the specimen of *Uvaria hahniana* labelled 'ISOTYPE' to be the holotype of this name.

There are many places commemorating San Cristóbal in Mexico, but fortunately perusal of the Sonnerat database indicated a *Piper* specimen collected the day before the *Tridimeris* type that mentions Orizaba as well as montagne St Christophe, confirming Veracruz as the likely state where the specimen was collected.

Tridimeris Baill., Adansonia 9: 219. 1869. TYPE: Tridimeris hahniana Baill.

- Tridimeris hahniana Baill., Adansonia 9: 219–220. 1869. TYPE: MEXICO. Veracruz. Orizaba, Mt. St. "Cristopha," 12 Aug 1865, L. Hahn s.n. (holotype: P (barcode no. P00734864); possible isotype: P (barcode no. P00734865)).
  - Uvaria hahniana Baill., Adansonia 8: 347. 1868 [as 'Uvaria (Porcelia?) Hahniana']. Tridimeris baillonii G.E.Schatz in Maas et al., Candollea 49: 466. 1994. TYPE: MEXICO. Veracruz. Forêt de la montagne Coachilote, 4 lieux de Misantla, 4 Jul 1866, L. Hahn 239 (P (barcode no. P00734866); possible isotypes: K (barcode no. K000221105), P-2 sheets (barcode nos. P00734867, P00734868).

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## LITERATURE CITED

- Baillon, H. 1868. Stirpes exoticae novae. Adansonia 8: 345–354.
- Baillon, H. 1869. Sur un nouveau genre d'Anonacées a fleurs dimères et unicarpellées. Adansonia 9: 218–220.
- Chatrou, L.W., M.D. Pirie, R.H.J. Erkens, T.L.P. Couvreur, K.M. Neubig, J.R. Abbott, J.B. Mols, J.W. Maas, R.M.K.Saunders, and M.W. Chase. 2012. A new subfamilial and tribal classification of the pantropical flowering plant family Annonaceae informed by molecular phylogenetics. Bot. J. Linn. Soc. 169: 5–40.
- Fries, R.E. 1931. Revision der Arten einiger Anonaceen-Gattungen. Acta Horti Berg. 10: 129–341.
- Kessler, P.J.A. 1993. Annonaceae. Pp. 93–129, in K. Kubitzki, J.G. Rohwer, and V. Bittrich (eds.). The Families and Genera of Vascular Plants. II. Flowering Plants · Dicotyledons: Magnoliid, Hamamelid and Caryophyllid Families. Springer-Verlag, Berlin.
- Maas, P.J.M., L.Y.T. Westra, H. Rainer, A.Q. Lobão, and R.H.J. Erkens. 1994. Index to species and infraspecific taxa of neotropical Annonaceae. Candollea 49: 389–481.
- Maas, P.J.M., L.Y.T. Westra, H. Rainer, A.Q. Lobão, and R.H.J. Erkens. 2011. An updated index to genera, species, and infraspecific taxa of Neotropical Annonaceae. Nordic J. Bot. 29: 257–356.
- McNeill, J., F.R. Barrie, W.R. Buck, V. Demoulin, W. Greuter, D.L. Hawksworth, P.S. Herendeen, S. Knapp, K. Marhold, J. Prado, W.F. Prud'homme van Reine, G.F. Smith, J.H. Wiersema, and N.J. Turland. (eds.). 2012. International Code of Nomenclature for algae, fungi, and plants (Melbourne Code). Regnum Vegetabile 146. A.R.G. Gantner Verlag, Ruggell.
- Pennell, F.W. 1919. Concerning duplicate types. Torreya 19: 13-14.